

- Child development

When a child seems too short

Monitor your kids' growth and understand the reasons behind a short stature, writes

New Straits Times · 5 Jul 2022 · 21 · Dr Wu Loo Ling The writer is a senior consultant paediatrician and paediatric endocrinologist at Subang Jaya Medical Centre.

NO parent wants to find out that his or her child is having a health disorder, but catching a condition early may mean the difference between optimum treatment and outcome, and not being able to do anything to help your child.



This is especially so when it comes to short stature or stunting. According to the 2019 National Health and Morbidity Survey, more than one in five (21.8 per cent) Malaysian children below age 5 are considered stunted.

It may be difficult for parents to tell whether their child is naturally short or is not growing well. There are three things they can keep in mind when checking their child's growth.

First is the child's expected height based on sex and age. This can be referred to standard growth charts, which provide a description of normal growth in percentiles and standard deviations.

If your child's height falls below the third percentile for his or her age, or is more than two standard deviations below the norm on the appropriate growth chart, then he or she can be considered short.

The second factor is the child's genetic potential. How tall your child grows is dependent on the associated genes he or she inherits from you and your partner.

Therefore, if you and your partner are both naturally short, it shouldn't be a surprise if your child is also short.

However, if both of you are tall and your child is short, then this may be a sign that something is preventing your child from achieving his or her full height potential.

Third is the child's growth velocity or how fast he or she is growing. If your child is growing at a normal rate, then starts to slow down, it is definitely a cause for concern.

Your child's growth should be fairly steady, meaning more or less on the same percentile or standard deviation throughout their childhood and adolescent years.

SHORT STATURE

There are many potential causes of short stature, but they can generally be grouped into three categories.

The first — and most common — is normal variant short stature. Those within this category are generally short by nature. It may be due to either their genetic potential or some unknown reasons.

Children in this group are usually otherwise healthy — just shorter than the norm. Those who are “late bloomers” or “late developers” also fall within this category.

The second category comprises intrinsic or primary short stature, or being born with the cause of your short stature.

A common reason for this is syndromic disorders, which are typically a result of genetic or chromosomal abnormalities.

Examples include Turner syndrome, Down syndrome, Prader-Willi syndrome, Noonan syndrome and achondroplasia, among others.

An intrauterine infection — where the mother catches an infection during pregnancy that also affects the foetus — can also cause the baby to be small.

Also in this category are babies who are considered small for their gestational age. This can be due to factors concerning the mother (having chronic conditions like high blood pressure, chronic kidney disease), the baby (being a twin or having a birth defect) or the placenta (decreased blood flow to the placenta, placenta previa or placental abruption).

While most children in this group tend to catch up in growth after birth, about 15 per cent don't and will remain small throughout their lives if not diagnosed and treated early.

The final category covers secondary causes of short stature. There are multiple causes within this category, but one of the most common in Malaysia is nutritional deficiency, including protein calorie malnutrition, iron and vitamin D deficiency.

Vitamin D deficiency is common as many children tend to spend most of their time indoors, resulting in a lack of exposure to sunlight.

The sun's ultraviolet B rays are a critical component in the production of vitamin D in our body. Vitamin D is, in turn, vital for the absorption of calcium to build and maintain our bones.

In vitamin D deficiency, the bones are soft and bowed, especially in the weightbearing lower limbs resulting in short stature.

Other secondary causes of short stature include systemic disorders like gut problems, heart disease or a weak immune system, as well as hormone deficiencies, like those that regulate growth.

ACT FAST

It is important that parents bring their child to see a paediatric endocrinologist, or at least a general paediatrician if they have any doubts about their child's growth.

Do not be complacent and hope your child will catch up in height later. Delaying diagnosis shortens the window period for remedy as the bones continue to mature over time.

Once fully matured, nothing can be done to help them grow any taller.